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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/994,284	11/26/2001	Sang Ick Lee	CU-2636 VE	8830

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EXAMINER	
PHAM, THANH V	
ART UNIT	**PAPER NUMBER**
2823	

DATE MAILED: 01/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No. 09/994,284	Applicant(s) LEE ET AL.	
	Examiner Thanh V Pham	Art Unit 2823	MW

--The MAILING DATE of this communication appears on the cover she t with the correspondence address --

THE REPLY FILED 07 January 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☐ The period for reply expires _____months from the mailing date of the final rejection.

b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
   - (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
   - (b) ☐ they raise the issue of new matter (see Note below);
   - (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   - (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.
3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *attached*.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: _____.

   Claim(s) objected to: _____.

   Claim(s) rejected: _____.

   Claim(s) withdrawn from consideration: _____.
8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

George Fourson
Primary Examiner

Response to Arguments

1. Applicant's arguments filed 01/07/04 have been fully considered but they are not persuasive.

2. The applicant states "the Maniar et al. reference teaches away from making the proposed combination" and points to "a selectivity as close to 1:1" of Maniar's col. 5, line 34. However, this is but one of Maniar's examples. In example 2, Maniar et al. discloses forming members 91-93 "using the aqua 'regia' solution previously described", col. 8, lines 19-24, to have a non-planar topology as in fig. 9, e.g., "the present invention may be used with any semiconductor substrate including silicon, ..., used with devices including MOSFET, ..., volume changes due to the reaction may need to be taken into account", col. 6, lines 10-28, "the intermetallic layer does not have to be very conformal", col. 10, lines 17-18. Those recognized facts by Maniar et al. are utilized to modify the applicant's admitted prior art structural gates in order to obtain the MOSFET recited in the claims of this application to prevent the gates being decapitated. The Maniar et al. reference discloses use of CeO_2 as slurry in CMP process in the variation of topologies with a pH in a range of about 2-5, the pH outside the range may be used (col. 4, lines 23-40 and col. 5, line 57 to col. 6, line 29). *The recited selection ratios* (the polishing selection ratios between the insulating interlayer and the dummy gate polysilicon layer is over 20 or the gate metal layer is over 50) *would be obtained because the same materials are treated in the same manner as in the instant invention.*

3. In response to applicant's argument that "additional reasons are present that mandate a finding of non-obviousness of the claimed invention", the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

4. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

TWP